AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A gallium-nitride-based light-emitting apparatus comprising:
   a substrate;
   a first-conducting-type clad layer formed on the substrate;
   an active layer formed on the first-conducting-type clad layer; and
   a second-conducting-type clad layer formed on the active layer,
   the active layer including barrier layers and well layers made of a gallium-nitride-based compound semiconductor, wherein
   the barrier layers of the active layer include a first barrier layer formed toward the first-conducting-type clad layer and second barrier layers sandwiched by the well layers,
   the light-emitting apparatus comprises a second-conducting-type carrier block layer between the active layer and the second-conducting-type clad layer, and
   the band gap Egb of the second-conducting-type carrier block layer, the band gap Eg2 of the second barrier layers, the band gap Eg1 of the first barrier layer, and the band gap Egc of the clad layers satisfy the relationship $Egb > Eg2 > Eg1 \geqq Egc$.

2. (Currently Amended) A gallium-nitride-based light-emitting apparatus according to claim 1, wherein [[the]]a thickness d1 of the first barrier layer and [[the]]a thickness d2 of each of the second barrier layers satisfy the relationship $d1 > d2$.

3. (Original) A gallium-nitride-based light-emitting apparatus according to claim 2, wherein the thickness d1 of the first barrier layer satisfies the relationship $d1 \leqq 50$ nm.

4. (Currently Amended) A gallium-nitride-based light-emitting apparatus according to claim 1 ~~or 2~~, wherein [[the]]a thickness d3 of each of the well layers satisfies ~~that~~ the relationship $d3 \leqq 4$ nm.

5. (Currently Amended) A gallium-nitride-based light-emitting apparatus according to ~~any one of~~ claim[[s]] 1~~ to 4~~, wherein the first barrier layer and the second barrier layers comprise $Al_xIn_yGa_{1-x-y}N$ ($0 \leqq x \leqq 0.3$ and $0 \leqq y \leqq 0.05$), and wherein the well layers comprise $Al_aIn_bGa_{1-a-b}N$ ($0 \leqq a \leqq 0.01$ and $0 \leqq b \leqq 0.1$).

6. (Currently Amended) A gallium-nitride-based light-emitting apparatus according to ~~any one of~~ claim[[s]] 1~~ to 5~~, wherein the second-conducting-type carrier block layer comprises $Al_pIn_qGa_{1-p-q}N$ ($0 \leqq p \leqq 0.5$ and $0 \leqq q \leqq 0.1$).

7. (Currently Amended) A gallium-nitride-based light-emitting apparatus according to ~~any one of~~ claim[[s]] 1~~ to 6~~, wherein the clad layers comprise a super-lattice structure formed by stacking layers of $Al_\alpha In_\gamma Ga_{1-\alpha-\gamma}N$ ($0 \leqq \alpha \leqq 0.2$ and $0 \leqq \gamma \leqq 0.1$) and layers of $Al_\beta In_\eta Ga_{1-\beta-\eta}N$ ($0 \leqq \beta \leqq 0.05$ and $0 \leqq \eta \leqq 0.1$).

8. (New) A gallium-nitride-based light-emitting apparatus according to claim 2, wherein a thickness d3 of each of the well layers satisfies the relationship $d3 \leqq 4$ nm.

9. (New) A gallium-nitride-based light-emitting apparatus according to claim 2, wherein the first barrier layer and the second barrier layers comprise $Al_xIn_yGa_{1-x-y}N$ ($0 \leqq x \leqq 0.3$ and $0 \leqq y \leqq 0.05$), and wherein the well layers comprise $Al_aIn_bGa_{1-a-b}N$ ($0 \leqq a \leqq 0.01$ and $0 \leqq b \leqq 0.1$).

10. (New) A gallium-nitride-based light-emitting apparatus according to claim 3, wherein the first barrier layer and the second barrier layers comprise $Al_xIn_yGa_{1-x-y}N$ ($0 \leqq x \leqq 0.3$ and $0 \leqq y \leqq 0.05$), and wherein the well layers comprise $Al_aIn_bGa_{1-a-b}N$ ($0 \leqq a \leqq 0.01$ and $0 \leqq b \leqq 0.1$).

11. (New) A gallium-nitride-based light-emitting apparatus according to claim 4, wherein the first barrier layer and the second barrier layers comprise $Al_xIn_yGa_{1-x-y}N$ ($0 \leqq x \leqq 0.3$ and $0 \leqq y \leqq 0.05$), and wherein the well layers comprise $Al_aIn_bGa_{1-a-b}N$ ($0 \leqq a \leqq 0.01$ and $0 \leqq b \leqq 0.1$).

12. (New) A gallium-nitride-based light-emitting apparatus according to claim 2, wherein the second-conducting-type carrier block layer comprises $Al_pIn_qGa_{1-p-q}N$ ($0 \leqq p \leqq 0.5$ and $0 \leqq q \leqq 0.1$).

13. (New) A gallium-nitride-based light-emitting apparatus according to claim 3, wherein the second-conducting-type carrier block layer comprises $Al_pIn_qGa_{1-p-q}N$ ($0 \leqq p \leqq 0.5$ and $0 \leqq q \leqq 0.1$).

14. (New) A gallium-nitride-based light-emitting apparatus according to claim 4, wherein the second-conducting-type carrier block layer comprises $Al_pIn_qGa_{1-p-q}N$ ($0 \leqq p \leqq 0.5$ and $0 \leqq q \leqq 0.1$).

15. (New) A gallium-nitride-based light-emitting apparatus according to claim 5, wherein the second-conducting-type carrier block layer comprises $Al_pIn_qGa_{1-p-q}N$ ($0 \leqq p \leqq 0.5$ and $0 \leqq q \leqq 0.1$).

16. (New) A gallium-nitride-based light-emitting apparatus according to claim 2, wherein the clad layers comprise a super-lattice structure formed by stacking layers of $Al_\alpha In_\gamma Ga_{1-\alpha-\gamma}N$ ($0 \leqq \alpha \leqq 0.2$ and $0 \leqq \gamma \leqq 0.1$) and layers of $Al_\beta In_\eta Ga_{1-\beta-\eta}N$ ($0 \leqq \beta \leqq 0.05$ and $0 \leqq \eta \leqq 0.1$).

17. (New) A gallium-nitride-based light-emitting apparatus according to claim 3, wherein the clad layers comprise a super-lattice structure formed by stacking layers of $Al_\alpha In_\gamma Ga_{1-\alpha-\gamma}N$ ($0 \leqq \alpha \leqq 0.2$ and $0 \leqq \gamma \leqq 0.1$) and layers of $Al_\beta In_\eta Ga_{1-\beta-\eta}N$ ($0 \leqq \beta \leqq 0.05$ and $0 \leqq \eta \leqq 0.1$).

18. (New) A gallium-nitride-based light-emitting apparatus according to claim 4, wherein the clad layers comprise a super-lattice structure formed by stacking layers of $Al_\alpha In_\gamma Ga_{1-\alpha-\gamma}N$ ($0 \leqq \alpha \leqq 0.2$ and $0 \leqq \gamma \leqq 0.1$) and layers of $Al_\beta In_\eta Ga_{1-\beta-\eta}N$ ($0 \leqq \beta \leqq 0.05$ and $0 \leqq \eta \leqq 0.1$).

19. (New) A gallium-nitride-based light-emitting apparatus according to claim 5, wherein the clad layers comprise a super-lattice structure formed by stacking layers of $Al_\alpha In_\gamma Ga_{1-\alpha-\gamma}N$ (0

$\leqq \alpha \leqq 0.2$ and $0 \leqq \gamma \leqq 0.1$) and layers of $Al_\beta In_\eta Ga_{1-\beta-\eta}N$ ($0 \leqq \beta \leqq 0.05$ and $0 \leqq \eta \leqq 0.1$).

20. (New) A gallium-nitride-based light-emitting apparatus according to claim 6, wherein the clad layers comprise a super-lattice structure formed by stacking layers of $Al_\alpha In_\gamma Ga_{1-\alpha-\gamma}N$ ($0 \leqq \alpha \leqq 0.2$ and $0 \leqq \gamma \leqq 0.1$) and layers of $Al_\beta In_\eta Ga_{1-\beta-\eta}N$ ($0 \leqq \beta \leqq 0.05$ and $0 \leqq \eta \leqq 0.1$).